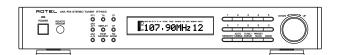


ROTEL

Owner's manual
Manuel d'utilisation
Bedienungsanleitung
Manuale di istruzioni
Manual de instrucciones
Gebruiksaanwijzing

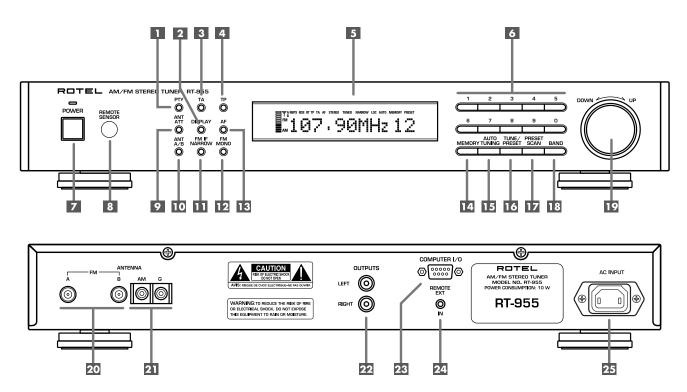
# **RT-955**

AM/FM Stereo Tuner
Tuner Stéréophonique AM/FM
AM/FM-Stereo-Tuner
Sintonizzatore Stereo AM/FM
Sintonizador Estereofónico de AM/FM
Middengolf/FM Stereo Afstemeenheid

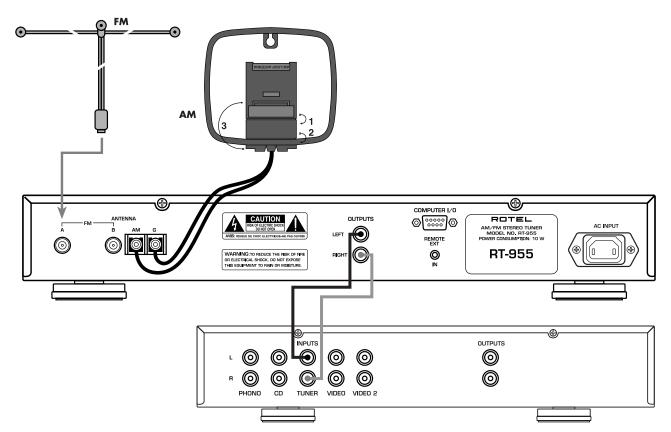


RT-955

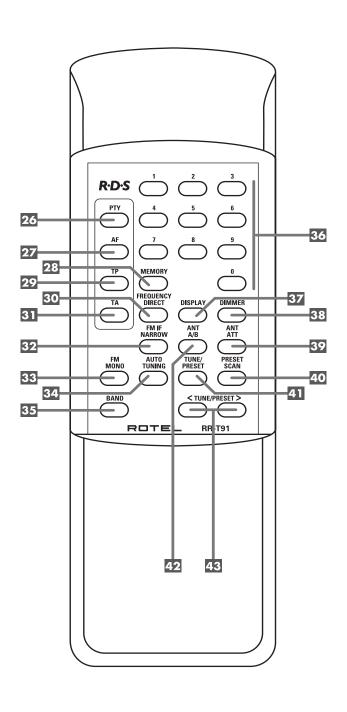
1: Controls and Connections / Bedienelemente und Anschlüsse / Commandes et Branchements Controles y Conexiones / Controlli e collegamenti / De bedieningsorganen en aansluitingen



2: Hook-up Illustration / Anschlußdiagramm / Schéma de branchement type Ejemplo de Conexionado / Schema di collegamento / Het aansluitingsschema



3: RR-T91 Remote Control Fernbedienung RR-T91 Télécommande RR-T91 Mando a Distancia RR-T91 Controllo a distanza RR-T91 De RR-T91 Afstandsbediening



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# APPLICABLE FOR USA, CANADA OR WHERE APPROVED FOR THE USAGE

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT. INSERT FULLY.

ATTENTION: POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU AU FOND.



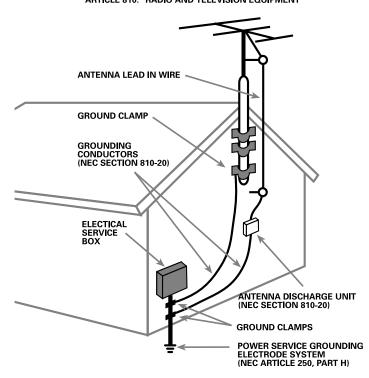
This symbol is to alert the user to the presence of uninsulated dangerous voltages inside the product's enclosure that may constitute a risk of electric shock.



This symbol is to alert the user to important operating and maintenance (service) instructions in this manual and literature accompanying the product.



ANTENNA GROUNDING ACCORDING TO NATIONAL ELECTRICAL CODE INSTRUCTIONS ARTICLE 810: "RADIO AND TELEVISION EQUIPMENT"



#### **WARNING:**

There are no user serviceable parts inside. Refer all servicing to qualified service personnel.

#### **WARNING:**

To reduce the risk of fire or electric shock, do not expose the unit to moisture or water. Do not allow foreign objects to get into the enclosure. If the unit is exposed to moisture, or a foreign object gets into the enclosure, immediately disconnect the power cord from the wall. Take the unit to a qualified service person for inspection and necessary repairs.

Read all the instructions before connecting or operating the component. Keep this manual so you can refer to these safety instructions.

Heed all warnings and safety information in these instructions and on the product itself. Follow all operating instructions.

Clean the enclosure only with a dry cloth or a vacuum cleaner.

You must allow 10 cm or 4 inches of unobstructed clearance around the unit. Do not place the unit on a bed, sofa, rug, or similar surface that could block the ventilation slots. If the component is placed in a bookcase or cabinet, there must be ventilation of the cabinet to allow proper cooling.

Keep the component away from radiators, heat registers, stoves, or any other appliance that produces heat.

The unit must be connected to a power supply only of the type and voltage specified on the rear panel of the unit.

Connect the component to the power outlet only with the supplied power supply cable or an exact equivalent. Do not modify the supplied cable in any way. Do not attempt to defeat grounding and/or polarization provisions. Do not use extension cords.

Do not route the power cord where it will be crushed, pinched, bent at severe angles, exposed to heat, or damaged in any way. Pay particular attention to the power cord at the plug and where it exits the back of the unit.

The power cord should be unplugged from the wall outlet if the unit is to be left unused for a long period of time.

Immediately stop using the component and have it inspected and/or serviced by a qualified service agency if:

- The power supply cord or plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit shows signs of improper operation
- The unit has been dropped or damaged in any way

Place the unit on a fixed, level surface strong enough to support its weight. Do not place it on a moveable cart that could tip over.

#### NOTE TO CATV SYSTEM INSTALLER:

Call the CATV system or antenna installer's attention to Article 820-40 of the NEC. This provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the pint of cable entry as practical. See installation diagram.

#### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause interference to radio or TV communications. There is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can determined by turning the equipment off and on, try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the unit and the television tuner
- Connect the unit to an AC power outlet on a different electrical circuit.
- Consult your authorized Rotel retailer for assistance.

#### Francais

#### Explication des symboles graphiques

L'éclair dans un triangle équilatéral indique la présence interne de tensions électriques élevées susceptibles de présenter des risques graves d'électrocution.

ATTENTION: POUR RÉDUIRE LE RISQUE D'ÉLECTROCUTION, NE PAS RETIRER LE CAPOT. IL N'Y A À L'INTÉRIEUR AUCUNE PIÈCE SUSCEPTIBLE D'ÊTRE MODIFIÉE PAR L'UTILISATEUR. EN CAS DE PROBLÈME, ADRESSEZ-VOUS À UN RÉPARATEUR AGRÉÉ.

Le point d'exclamation dans un triangle équilatéral indique à l'utilisateur la présence de conseils et d'informations importantes dans le manuel d'utilisation accompagnant l'appareil. Leur lecture est impérative.

ATTENTION: Il n'y a à l'intérieur aucune pièce susceptible d'être modifiée par l'utilisateur. Adressez-vous impérativement à une personne auglifiée.

ATTENTION: Prenez garde à ce qu'aucun objet ou liquide ne tombe à l'intérieur de l'appareil par ses orifices de ventilation ; Si l'appareil est exposé à l'humidité ou si un objet tombe à l'intérieur, couper immédiatement l'alimentation secteur de tous les appareils. Débrancher l'appareil des autres maillons, et adressez-vous immédiatement et uniquement à une personne qualifiée et agréée.

Lisez les instructions: Tous les conseils de sécurité et d'installation doivent être lus avant de faire fonctionner l'appareil. Conservez soigneusement ce livret - Vous devez pouvoir le consulter à nouveau pour de futures références.

Respectez tous les conseils: Tous les conseils de sécurité doivent être soigneusement respectés. Suivez les instructions - Respectez les procédures d'installation et de fonctionnement indiauées dans ce manuel.

Entretien: L'appareil doit être nettoyé uniquement selon les recommandations de son constructeur.

Ventilation: L'appareil doit être placé de telle manière que sa propre ventilation puisse fonctionner. Par exemple, il ne doit pas être posé sur un fauteuil, un canapé, une couverture ou toute autre surface susceptible de boucher ses ouïes d'aération; ou placé dans un meuble empêchant la bonne circulation d'air autour des orifices d'aération.

Chaleur: Cet appareil doit être placé loin de toute source de chaleur, tels que radiateurs, chaudières, bouches de chaleur ou d'autres appareils (y compris amplificateurs de puissance) produisant de la chaleur.

Cet appareil doit être branché sur une prise d'alimentation secteur, d'une tension et d'un type conformes à ceux qui sont indiqués sur la face arrière de l'appareil.

Brancher l'appareil uniquement grâce au cordon secteur fourni, ou à un modèle équivalent. Ne pas tenter de modifier ou changer la prise. Notamment, ne pas tenter de supprimer la prise de terre si celle-ci est présente. Ne pas utiliser de cordon rallonge.

Prendre garde à ce que ce cordon d'alimentation ne soit pas pincé, écrasé ou détérioré sur tout son trajet, à ce qu'il ne soit pas mis en contact avec une source de chaleur. Vérifier soigneusement la bonne qualité des contacts, à l'arrière de l'appareil comme dans la prise murale.

Si l'appareil ne doit pas être utilisé pendant une longue période, la prise secteur sera débranchée.

Service après vente: L'appareil doit être immédiatement éteint, débranché puis éventuellement retourné au service après-vente agréé dans les cas suivants:

- Le cordon secteur ou la prise ont été endommagés.
- Un objet est tombé, ou du liquide a coulé à l'intérieur de l'appareil.
- L'appareil a été exposé à la pluie.
- L'appareil ne fonctionne pas normalement, ou ses performances sont anormalement limitées.
- L'appareil est tombé, ou le coffret est endommagé.

Placer l'appareil sur une surface plane, solide et rigide. Ne jamais placer l'appareil sur une surface ou un support mobile pouvant basculer.

# **Deutsch**

Bitte lesen Sie sich die Bedienungsanleitung vor Gebrauch des Gerätes genau durch. Sie enthält wichtige Sicherheitsvorschriften, die unbedingt zu beachten sind! Bewahren Sie die Bedienungsanleitung so auf, daß sie jederzeit zugänglich ist.

Außer den in der Bedienungsanleitung beschriebenen Handgriffen sollten vom Bediener keine Arbeiten am Gerät vorgenommen werden. Das Gerät ist ausschließlich von einem qualifizierten Fachmann zu öffnen und zu reparieren.

Dieses Gerät darf nur in trockenen Räumen betrieben werden. Um die Gefahr von Feuer oder eines elektrischen Schlags auszuschließen, dürfen keine Flüssigkeiten oder Fremdkörper in das Gerät gelangen. Sollte dieser Fall trotzdem einmal eintreten, trennen Sie das Gerät sofort vom Netz ab. Lassen Sie es von einem Fachmann prüfen und die notwendigen Reparaturarbeiten durchführen.

Befolgen Sie alle Warn- und Sicherheitshinweise in der Bedienungsanleitung und auf dem Gerät.

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# **About Rotel**

A family whose passionate interest in music led them to manufacture high fidelity components of uncompromising quality founded Rotel over 30 years ago. Through the years that passion has remained undiminished and the family goal of providing exceptional value for audiophiles and music lovers regardless of their budget, is shared by all Rotel em-

The engineers work as a close team, listening to, and fine tuning each new product until it reaches their exacting musical standards. They are free to choose components from around the world in order to make that product the best they can. You are likely to find capacitors from the United Kingdom and Germany, semi conductors from Japan or the United States, while toroidal power transformers are manufactured in Rotel's own factory.

Rotel's reputation for excellence has been earned through hundreds of good reviews and awards from the most respected reviewers in the industry, who listen to music every day. Their comments keep the company true to its goal - the pursuit of equipment that is musical, reliable and affordable.

All of us at Rotel, thank you for buying this product and hope it will bring you many hours of enjoyment.

# **Getting Started**

Thank you for purchasing the Rotel RT-955 AM/FM Stereo Tuner. Rotel's Balanced Design Concept combines advanced circuit board layout, comprehensive parts evaluation, and extensive listening tests for superior sound and long term reliability. The RT-955 will provide years of listening enjoyment.

# **RT-955 Key Features**

- AM and FM tuning capabilities
- User-friendly Fluorescent Display
- 30 Station Presets for memorizing your favorite stations
- Manual frequency and preset tuning, autosearch tuning, preset scanning, and frequency direct tuning.
- RDS (Radio Data System) capability for Europe and RBDS (Radio Broadcast Data Service) capability for the USA.
- Dual selectable FM antenna inputs
- Stereo/mono switching, selectable local/ distance antenna attenuation, selectable narrow/wide IF band.
- Full-function wireless remote control

# Unpacking

Remove the unit from its packing. Look for the handheld remote control and other accessories. Install the supplied batteries in the remote control. Save the packing and box as it will protect the RT-955 if you move or need to return it for maintenance.

## **Placement**

Place the RT-955 on a solid, dry, level surface away from direct sunlight, excessive heat, high humidity, or strong vibrations.

The RT-955 can generate some heat during normal operation. If installed in a cabinet, make sure that there is adequate ventilation.

Make sure there is enough room behind the RT-955 for easy hookup. Place the unit close to the other components in your audio/video system and, if possible, place it on its own shelf. This will make initial cable routing, hookup, and any subsequent system changes easier. It also minimizes potential interference or heat buildup from other components.

Don't stack heavy objects on top of the RT-955. Do not expose the unit to moisture as this could damage delicate circuitry and result in a safety hazard.

# **Rear Panel Connections**

The RT-955 provides rear panel connections for audio line level output, two FM antennas, an AM antenna, DB-9 computer interface, a remote IR sensor connection, and AC power input.

**NOTE:** Do not plug any system component into an AC source until system hookup is complete and you are confident that all component-to-component connections have been properly made.

# RCA Outputs 22

A pair of line level RCA audio outputs sends a fixed-level stereo signal from the RT-955 to your preamplifier, system controller, or integrated amplifier. Use a standard RCA audio cable to connect the LEFT OUTPUT jack to the left channel tuner input on your system controller and the RIGHT OUTPUT jack to the right channel tuner input on your system controller.

# AM Loop Antenna 21

The RT-955 includes a loop antenna to receive AM radio signals. Remove this antenna from the box and locate it near the RT-955.

Connect the 300 ohm twin-conductor wire from the loop antenna to the pair of screw terminals labeled AM LOOP, attaching one wire to each terminal. It does not matter which wire attaches to which terminal, but make sure that the connections are solid and that the two wires do not touch.

You may need to rotate or otherwise reorient the antenna to find the best position.

**NOTE:** To use an outdoor antenna, connect its 300 ohm twin-conductor wire to the G and AM terminals in place of the loop antenna, only after a professional contractor has installed the antenna system in accordance with local electrical codes.

## FM Antenna 20

The RT-955 has two FM antenna connections, labeled A and B. This permits you to switch between two different FM antenna systems using a front panel or remote control switch. This feature could be useful to switch between an indoor antenna and an outdoor antenna system or between a standard FM antenna and a cable or satellite TV decoder that provides an FM antenna signal.

**NOTE:** The following instructions assume the use of a standard FM wire antenna supplied with the unit. To hook up a cable or satellite TV FM antenna system, see the instructions supplied with that unit.

The RT-955 is supplied with a T-shaped indoor FM antenna. Remove this antenna from the box and connect its attached coax F-type plug to one of the the FM antenna connectors on the RT-955. For best reception, unfold the T-shaped antenna. Eyelets at both ends of the T allow tacking the antenna to a wall, if desired. Experiment with positioning for best reception.

**NOTE:** To use an outdoor antenna, connect its 75 ohm coax lead wire to the FM connector in place of the indoor wire antenna, only after a professional contractor has installed the antenna system in accordance with local electrical codes. In the USA, you will need to use the supplied F-type converter to connect the 75 ohm coax cable to the antenna input.

# AC Input 25

Your RT-955 is configured at the factory for the proper AC line voltage in the country where you purchased it (120 volts AC at 60Hz in the USA and 230 volts AC at 50Hz in Europe). The AC line configuration is noted on a decal on the back of your unit. Make sure that your unit is configured properly for your AC line voltage.

Plug the supplied cord into the AC INPUT receptacle on the back of the unit. Once all other rear panel connections are completed, plug the power cord into an AC wall outlet or switched AC outlet on another system component.

# **REMOTE EXT IN Jack 24**

This 3.5mm mini-jack receives command codes from industry-standard infrared receivers (Xantech, etc.) via hard-wired connections. This feature could prove useful when the unit is installed in a cabinet and the frontpanel sensor is blocked. Consult your authorized Rotel dealer for information on these external repeaters and the proper wiring of a jack to fit the mini-jack receptacle.

# **COMPUTER I/O Interface 23**

This RS-232 serial computer interface connection allows you to operate the unit from a stand-alone home automation controller or from a PC computer running special software. Consult your authorized Rotel dealer for information on these systems and the proper interface with your RT-955's DB9 serial connector.

**NOTE:** Information on commercial software for using your personal computer to operate audio/video components, including the RT-955, can be found at the Rotel website: **www.rotel.com/downloads/** 

# **Basic Operating Controls**

The following explanations will help you get familiar with the features, and controls. Number references corresponding to the illustrations at the front of this manual.

Most functions are duplicated on the front panel and on the handheld remote control shipped with your unit. When two reference numbers appear, one refers to the location of the control on the front panel, the other refers to the location of the corresponding control on the handheld remote. When only one number is shown, that control is available only on the front panel or the remote, as noted in the text.

**NOTE:** Controls used for tuning the AM/FM receiver are described in the next sections of this manual.

## Power Button 7

The POWER button is located on the front panel of the RT-955 and is not duplicated on the remote control.

Push the button IN to turn the unit on. The LED above the switch and the front panel display will light up. Push the button again (returning it to the OUT position), to turn the unit off.

**NOTE:** If you are using a switched outlet on another component to power the RT-955, you should leave the POWER switch in the ON position. The RT-955 will be switched on and off by the other component's switched outlet.

# Remote Sensor 8

This front panel sensor receives infrared signals from the remote control. Make sure you do not accidentally block this sensor with cables or accessories.

# Front Panel Display 5

The large fluorescent display in the center portion of the RT-955 provides status information used in operating the AM/FM receiver (such as station frequency display, band, preset memory, RDS information, etc.).

#### **DIMMER Button 38**

Available only on the remote control, this button temporarily reduces the brightness of the front panel DISPLAY. Press the button to toggle between the normal brightness and reduced brightness. When the tuner is turned off, the DISPLAY will revert to its normal setting.

## **MEMORY Button 14 28**

The MEMORY button is used to confirm and memorize various settings in the setup and operation of the RT-955, including tuner station presets. Its use is described in detail in the relevant sections below.

# **Setting Country Mode**

The RT-955 has two default modes, one for the USA and one for Europe. These configure the unit for differences in local markets, including FM tuning intervals, AM tuning intervals, and differences in the European RDS and United States RBDS standards. Your unit has been factory configured to the correct default mode for the country in which it was purchased.

**To switch to the USA default mode**, press and hold the POWER, MEMORY, and 9 buttons for 5 seconds. The word LOAD-ING will appear in the DISPLAY and the unit will power up in the USA configuration.

**To switch to the European default mode**, press and hold the POWER, MEMORY, and 0 buttons for more than 5 seconds. The word LOADING will appear in the DISPLAY and the unit will power up in the European configuration.

# **Basic Tuning Controls**

The RT-955 features a digital synthesized AM/FM tuner with RDS or RBDS capability and 30 station presets. The unit offers a wide range of tuning options. Here is an overview of the tuning options (more detailed information is provided in subsequent sections of this manual):

- Manual frequency tuning lets you tune up or down to the next station frequency. Set the TUNE/PRESET mode to TUNE. Turn off AUTO TUNING. Use the TUNING controls to tune up or down.
- Direct frequency tuning lets you enter the desired station frequency digits. Press the FREQUENCY DIRECT button on the remote and enter the digits using the NUMERIC buttons.
- Automatic frequency search tuning lets you search up or down to find the next receivable broadcast signal. Set the TUNE/PRESET mode to TUNE. Turn on AUTO TUNING. Use the TUNING controls to search up or down.
- Memory station preset tuning lets you directly enter the number of a memorized station preset number. Enter the number of the memorized preset using the NUMERIC buttons.
- Preset scan tuning lets you scan up/ down through the memorized station presets. Press the PRESET SCAN button to begin scanning.

 RDS (Europe) or RBDS (USA) tuning provides a range of special tuning and search features based on data codes encoded with the broadcast signal. See the RDS section of this manual for detailed information.

# BAND Button 18 35

The BAND button selects whether the tuner will receive AM or FM broadcast signals. Press the button to toggle back and forth between AM and FM. A corresponding indicator will light at the left portion of the front panel DISPLAY to confirm your choice. The currently tuned station frequency will be shown.

## **TUNING Controls 19 43**

A large rotary control on the front panel and a corresponding pair of buttons on the remote serve as the main tuning controls for the RT-955.

**Front Panel:** Use the large rotary TUNING knob. Turn clockwise to tune up or counterclockwise to tune down.

**Remote Control:** Use the pair of buttons in the lower right corner of the remote control keypad labeled < TUNE / PRESET >. Press the right button to tune up and the left button to tune down.

These controls provides several different tuning functions, depending on the mode of operation:

In the FREQUENCY TUNING mode with AUTO TUNING off, press a TUN-ING button to manually jump to the next frequency, regardless of whether or not a station is broadcasting on that frequency. [See the TUNE/PRESET button and AUTO TUNING button sections for details on changing the tuning modes.]

In the FREQUENCY TUNING mode with AUTO TUNING on,, press a TUN-ING button to start auto tuning. The tuner begins automatically scanning up or down through the frequencies until the next receivable signal is detected. If this is not the desired station, repeat the automatic tuning procedure to find the next station. Weak stations will be skipped during auto tuning. If no receivable signal is detected, the tuner will revert to the last previously tuned station. [See

the TUNE/PRESET button and AUTO TUN-ING button sections for details on changing the tuning modes.]

In the PRESET TUNING mode, press a TUNING button to advance to the next memorized station preset. [See the TUNE/PRESET button section for details on changing the tuning modes.]

In the RDS PTY search mode, press a TUNING button to select the desired program type from the scrolling list in the display. See the section on RDS tuning for more details. [See the RDS PTY button section for details.]

**NOTE:** Several indicators in the front panel display assist tuning. A large display shows the tuned frequency and increases or decreases during tuning. A signal strength indicator shows the strength of the incoming signal. A TUNED indicator lights when a sufficiently strong signal is received. A ST indicator lights when a stereo FM signal is received. In addition, indicators show the currently selected tuning mode.

# NUMERIC Buttons: Station Presets 6 36

The RT-955 can store up to 30 station presets for recall at any time using the NUMERIC keypad. These station presets can be used for any combination of AM stations and FM stations.

The RT-955 is delivered from the factory with a set of generic station presets that may or may not match any available stations in your area. To memorize a new station preset:

- 1. Tune to the desired station, AM or FM.
- Press the MEMORY button on the front panel. A MEMORY indicator will flash in the front panel display.
- 3. While the MEMORY indicator is flashing, press the number of the preset where you wish to store the station frequency. For example, to memorize the station as preset 3, press the 3 button. To memorize preset 15, press the 1 button followed by the 5 button.
- A previously stored frequency is erased from memory when a new frequency is memorized for the same preset number.

To tune to a previously memorized station preset from 1 through 29, press the preset number using the NUMERIC buttons. For example, to tune to preset 3, press the 3 button. To tune to preset 15, press the 1 button and then press the 5 button within 5 seconds.

# To tune to preset 30, press the number 0.

When a station preset is selected, the preset number appears in the DISPLAY to the right of the station frequency.

**NOTE:** The NUMERIC buttons can also be used for FREQUENCY DIRECT tuning.

# FREQUENCY DIRECT Button: Direct Access Tuning 50

If you know the exact frequency of the desired station, you may tune it directly using the FREQUENCY DIRECT button (remote only) and the NUMERIC buttons.

- Press the FREQUENCY DIRECT button to change the NUMERIC buttons from station preset to direct access mode. The station frequency in the front panel display will change to a series of bars, representing the digits of a station frequency, with the first bar blinking.
- 2. Enter the first digit of the station frequency using the NUMERIC buttons. The digit will appear in the frequency display and the next bar will flash. Enter the remaining digits of the frequency. When all of the digits have been entered, the tuner will automatically tune to the displayed station frequency.

NOTE: On the USA version only, pressing 1 in the FM mode will enter 10 as the digit in the frequency display. On the European version, it is necessary to press 1 and then 0 to enter 10. For US FM stations, press only one digit following the decimal point as shown in the first example following. For European FM stations, press two digits after the decimal point as shown in the second example.

#### **EXAMPLES:**

(USA FM) 87.50MHz Press 8>7>5 (Europe FM) 87.50MHz Press 8>7>5>0 (all AM) 1610kHz Press 1>6>1>0

If no frequency is entered within 5 seconds, the tuner will cancel FREQUENCY DIRECT tuning mode and revert to the last previously tuned station.

# **AUTO TUNING Button 15 34**

The AUTO TUNING button toggles between the frequency search tuning feature and manual frequency tuning. When using the TUNING controls on the front panel or remote in AUTO TUNING mode, the tuner will begin automatically scanning up or down through the frequencies until the next receivable broadcast signal is detected. If this is not the desired station, use the TUNING controls again to find the next station. Weak stations will be skipped during auto tuning. If no receivable signal is detected, the tuner will revert to the previously tuned station.

To toggle between FREQUENCY TUNING mode and AUTO TUNING mode, press the AUTO TUNING button. An AUTO indicator will appear in the display.

**NOTE:** AUTO TUNING mode is disengaged when the TUNE/PRESET button is set to PRESET tuning mode. See the following section.

# **TUNE/PRESET Button 16 41**

The TUNE/PRESET button toggles between FREQUENCY TUNING mode (the TUNING controls advance to the next station frequency) and PRESET TUNING mode (the TUNING controls advance to the next memorized station preset). To toggle between the two modes, press the TUNE/PRESET button. A PRESET indicator in the front panel DISPLAY will light when the PRESET mode is active.

**NOTE:** AUTO TUNING mode is disengaged when the TUNE/PRESET button is set to PRESET tuning mode.

# PRESET SCAN Button 17 40

This button activates a preset scanning feature. When you press the button, the tuner will automatically scan through all memorized station presets, playing each for five seconds before moving to the next. To stop the station scanning on the desired station preset, press the button again.

**NOTE:** If a PRESET station is currently tuned when the PRESET SCAN button is pressed, scanning will start with the next higher preset number and continue through all preset stations, stopping on the initial preset. If a PRESET station is not currently tuned when the button is pressed, scanning will start from PRESET 1 and continue to PRESET 30.

# RDS and RBDS Broadcast Reception

The Rotel RT-955 is equipped with RDS (Radio Data Systems) reception capabilities for Europe and RBDS (Radio Broadcast Data Service) capabilities for the United States. These broadcast systems provide additional functionality to FM radio reception by transmitting encoded information along with the radio signal. This signal is decoded by an RDS or RBDS receiver and can provide a range of informational features including:

- a display of the station's identifying name (e.g. BBC1)
- 2. a display of the station's program content (e.g. ROCK or NEWS)
- 3. traffic information broadcasts
- 4. a scrolling text display for announcements or information

In addition, RDS provides several advanced search features including:

- the ability to search for a station with the desired program content (PTY)
- 2. the ability to search for traffic information (TP)
- the ability to automatically search stations broadcasting special traffic announcements (TA).

RDS broadcasting has been widely available in many European markets for years. There are a large number of RDS stations and most users will be familiar with the features and operation. In the USA, implementation of the RBDS system is more recent. Fewer stations are currently broadcasting RBDS signals and the features may be less familiar to many users. Consult your authorized Rotel dealer for more information on RDS or RBDS broadcasting in your market.

**NOTE:** The RDS and RBDS features are entirely dependent on the broadcaster sending properly encoded signals. Thus, they will only be available in markets where RDS or RBDS is currently implemented and where stations are broadcasting these data signals. If there are no RDS or RBDS stations, the RT-955 will function as a standard radio receiver.

**NOTE:** RDS and RBDS services are only available on FM broadcasts. The features and buttons described below are only operational in FM mode.

# DISPLAY Button 2 37

There are five display options when the currently tuned station is broadcasting RDS information and the RDS indicator in the front panel display is lit. Press the DISPLAY button to step sequentially through the five available display options:

- 1. Standard FREQUENCY display.
- PROGRAM SERVICE name. This is typically the station's call letters, such as BBC1). If the current station is not broadcasting an RDS signal, the display will show a blinking PS indication.
- 3. PROGRAM TYPE. This is a description of the station's content from a standardized list of program types in each market (for example: NEWS, CURRENT AFFAIRS, INFO, SPORT, EDUCATION, DRAMA, CULTURE, SCIENCE, VARIED, POP, ROCK, EASY LISTENING, LIGHT CLAS-SICAL, SERIOUS CLASSICAL, OTHER MUSIC, WEATHER, FINANCE, CHIL-DREN, SOCIAL AFFAIRS, RELIGION, PHONE IN, TRAVEL, LEISURE, JAZZ, COUNTRY, NATIONAL MUSIC, OLDIES, FOLK, and DOCUMENTARY). If the current station is not broadcasting an RDS signal, the display will show a blinking PT indication.
- CLOCK TIME. A time and date display broadcast by the station. If the current station is not broadcasting an RDS signal, the display will show a blinking CT indication.
- RADIO TEXT. Additional scrolling text messages broadcast by the station. If the current station is not broadcasting an RDS signal, the display will show a blinking RT indication.

# PTY Button 1 26

The PTY search function permits you to scan available signals for RDS stations broadcasting a particular type of program content.

- Press the PTY button. The current RDS program content type will appear in the display.
- If desired, change to a different PRO-GRAM TYPE using the TUNING controls to scroll through the list.
- Press the PTY button a second time within 5 seconds. The tuner will attempt to find an RDS station broadcasting the selected type of program. If the button is not pressed within 5 seconds after selecting a program type, the PTY function will be cancelled.
- If no station is located for the desired content type, the tuner will return to the last previously tuned station.
- 5. Cancel the PTY function by pressing any button (except DIMMER or FM MONO).

# TP Button 4 29

Searches for an RDS station broadcasting traffic information programming:

- Press the TP button. The tuner will attempt to find an RDS station broadcasting the traffic programming.
- 2. If no station is located, the tuner will return to the last previously tuned station.
- Cancel the TP function by pressing any button (except DIMMER or FM MONO).

# TA Button 3 31

Searches for an RDS station broadcasting special traffic announcements:

- Press the TA button. The tuner will attempt to find an RDS station broadcasting traffic announcements.
- 2. If no station is located, the tuner will return to the last previously tuned station.
- Cancel the TA function by pressing any button (except DIMMER or FM MONO).

# AF Button 13 27

In some cases, an RDS station is part of a network of stations broadcasting the same programming (for example, BBC1 programming in the UK may be available at several different frequencies). Stations broadcasting this programming may transmit an RDS data signal providing the tuner with a list of alternate frequencies where this programming is available. If this data list is transmitted, an AF indicator will appear in the DISPLAY.

The AF button is used to scan the alternate frequencies to find a stronger signal. The button is only functional when the AF indicator is lit.

- Press the AF button. The tuner will scan each of the alternate frequencies for the same programming in the stored list and tune to the strongest signal.
- 2. If no station is located, the tuner will return to the last previously tuned station.
- 3. If the signal strength of the new station is weaker, the tuner will revert to the previously tuned station.
- 4. Cancel the AF function by pressing any button (except DIMMER or FM MONO).

# **Additional Tuning Features**

The following buttons provide features which may be used to improve FM reception and/or provide additional functionality:

## FM MONO Button 12 33

The FM MONO button changes the FM mode from stereo reception to mono reception. In stereo mode, a stereo signal will be heard if the station is broadcasting a stereo signal and there is sufficient signal strength. A stereo indicator will light in the front panel display. In mono mode, a mono signal will be heard even if the station is broadcasting a stereo signal.

**NOTE:** Switching to mono mode can be a useful way to improve the reception of weak or distant FM signals. Less signal strength is required for clean mono reception than for stereo reception.

# ANT ATT Button 9 39

Commonly known as a LOC/DISTANCE switch, the ANT/ATT button reduces the signal level at the FM antenna input. For the best reception of stations located some distance away, this button should be in the default or OFF position. However, if you are located in an urban area very close to the radio transmitter, the incoming signal may be high enough to overload the FM inputs. Press this button to reduce the incoming signal. When activated, a LOC indicator will appear in the DISPLAY. Press the button again to toggle back to normal operation. This switch only effects FM reception.

# FM IF NARROW Button III 32

FM reception works by receiving and decoding a carrier signal centered at the tuned frequency. To accommodate broadcast stations that may be slightly misadjusted off this carrier frequency, the receiver accepts signals slightly to either side of the tuned frequency. This provides satisfactory performance in most reception areas.

If you are located in an urban area with a large number of stations with closely spaced frequencies, you may occasionally notice interference from adjacent stations. To provide better performance under these conditions, the RT-955 allows you to reduce the range of frequencies to either side of the precise tuned frequency, thus reducing inter-station interference. Press the FM IF NARROW button to use this feature. A NARROW indication will appear in the DISPLAY. Press the button again to toggle back to normal operation.

# ANT A/B Button 10 42

As described in the REAR PANEL CONNEC-TIONS section of this manual, the RT-955 provides two FM antenna connections, labeled A and B. This button toggles between the two antenna inputs. An A or B indicator will appear in the DISPLAY, indicating which FM antenna input is currently active.

# **Specifications**

#### **FM Tuner**

#### **Usable Sensitivity:**

12.2 dBf

#### **50dB Quieting Sensitivity:**

20.2 dBf (mono)

45.3 dBf (stereo)

#### Signal to Noise Ratio (at 65 dBf):

75 dBf (mono) 72 dBf (stereo)

# Harmonic Distortion (at 65 dBf):

0.2% (mono)

0.3% (stereo)

#### Frequency Response:

10 Hz-15 kHz, ± 3 dB

#### **Capture Ratio:**

#### **Alternate Channel Selectivity:**

47 dB (± 400 kHz)

#### **Spurious Response Ratio:**

## **Image Rejection Ratio:**

80 dB

#### **IF Rejection Ratio:**

80 dB

# **AM Suppression Ratio:**

# 55 dB

**Stereo Separation** (100Hz/1 kHz/10 kHz):

40 dB/45 dB/35 dB

## **Output level:**

## **Antenna Input:**

75 ohms unbalanced

## **AM Tuner**

## **Usable Sensitivity:**

300 µV/m

#### Selectivity:

25 dB

#### **Harmonic Distortion:**

#### **Image Rejection Ratio:**

45 dB

#### Signal to Noise Ratio:

48 dB

# Output level:

## **Antenna Input:**

Loop Antenna

#### **General**

#### **Power Consumption:**

#### Power Requirements (AC):

120 volts, 60 Hz (USA version) 230 volts, 50 Hz (European version)

#### Weight:

3.7 Kg/8.2 lb.

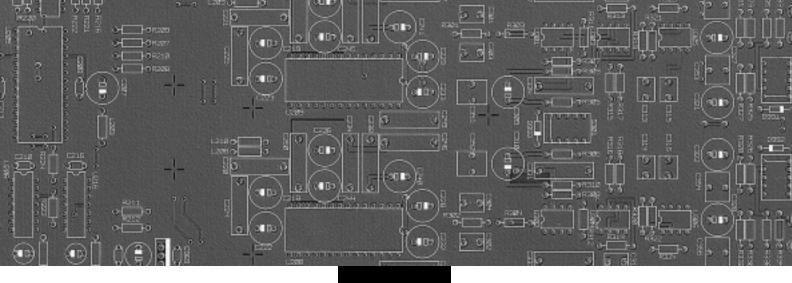
### Dimensions (W $\times$ H $\times$ D):

440 x 72 x 286 mm 173/8" x 27/8" x 111/4"

All specifications are accurate at the time of

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# ROTEL

# The Rotel Co. Ltd.

10-10 Shinsen-Cho Shibuya-Ku Tokyo 150-0045 Japan none: +81 3-5458-53:

Phone: +81 3-5458-5325 Fax: +81 3-5458-5310

## **Rotel of America**

54 Concord Street North Reading, MA 01864-2699 USA Phone: +1 978-664-3820

Fax: +1 978-664-4109

# **Rotel Europe**

Meadow Road Worthing, West Sussex BN11 2RX England Phone: +44 (0)1903 524 813 Fax: +44 (0)1903 524 831

# **Rotel Deutschland**

Kleine Heide 12 D-33790 Halle/Westf. Germany

Phone: +49 05201-87170 Fax: +49 05201-73370